Earthquake Shaking **Green Alert**

M 4.1, Southern Alaska

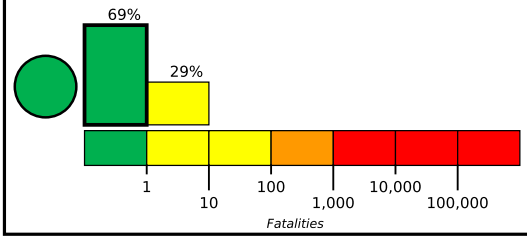
Origin Time: 2023-10-04 00:08:12 UTC (Tue 16:08:12 local)
Location: 61.9292° N 149.3058° W Depth: 41.5 km

PAGER Version 1

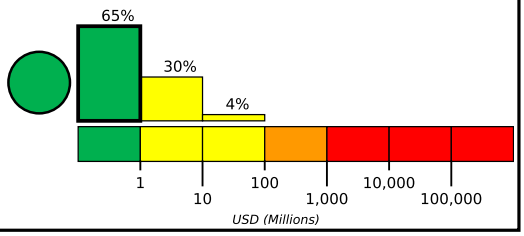
Created: 15 minutes, 10 seconds after earthquake

Estimated Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.



Estimated Economic Losses



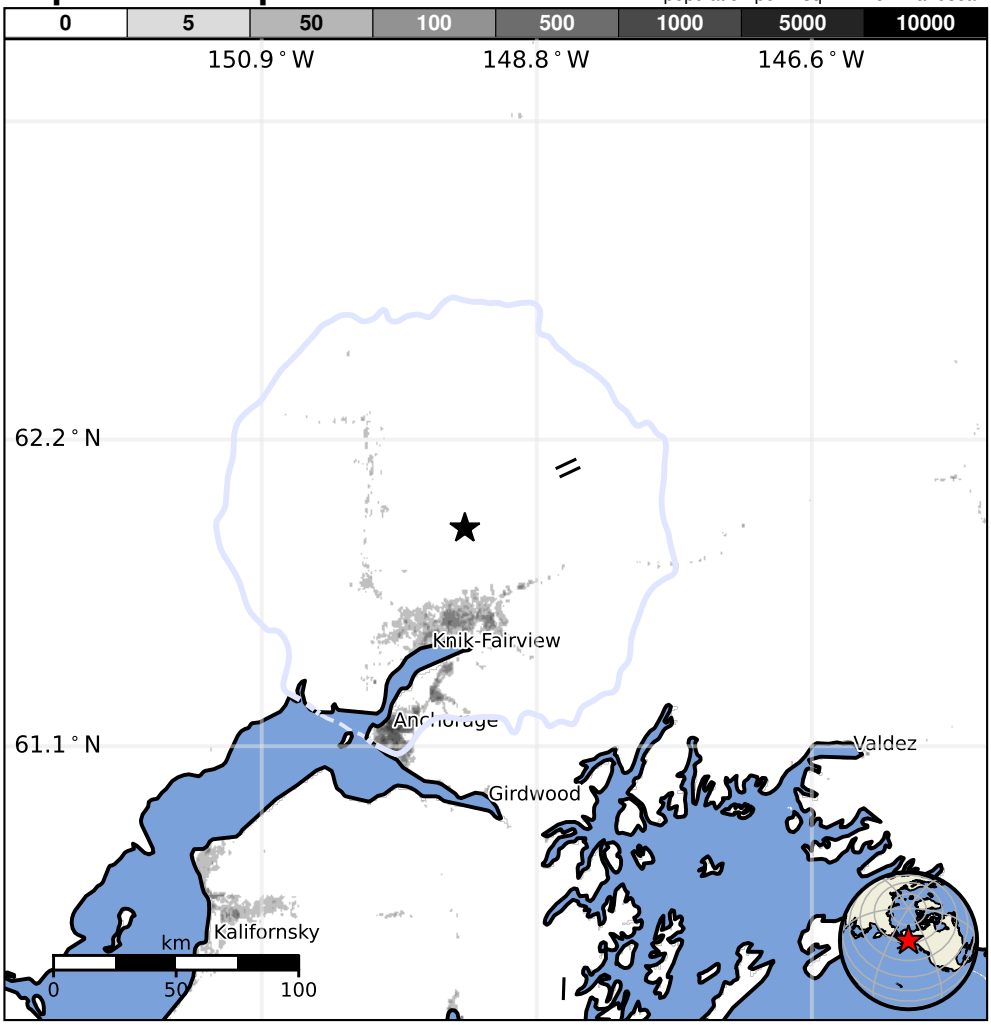
Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		61k	402k	0	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure

population per 1 sq. km from Landscan



Structures

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are unreinforced brick masonry and reinforced masonry construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
2002-11-03	196	7.9	V(36k)	0
1964-03-28	134	9.2	VIII(24k)	–
1964-03-28	134	9.2	VIII(24k)	0

Recent earthquakes in this area have caused secondary hazards such as landslides and liquefaction that might have contributed to losses.

Selected City Exposure

from GeNames.org

MMI	City	Population
II	Houston	2k
II	Meadow Lakes	8k
II	Y	1k
II	Tanaina	8k
II	Farm Loop	1k
II	Lakes	8k
II	Wasilla	8k
II	**Knik-Fairview**	**15k**
II	Eagle River	25k
II	**Anchorage**	**292k**
I	**Kalifornsky**	**8k**

bold cities appear on map. (k=x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.

https://earthquake.usgs.gov/earthquakes/eventpage/ak023cq3wvg8#pager

Event ID: ak023cq3wvg8